Remarks

The Present Invention and the Pending Claims

This invention relates to a method for searching multiple query sequences against one or more sequence databases. More specifically, the invention relates to a computer-implemented method and apparatus that provides high-performance, high-speed, remotely accessible sequence comparison searches.

Claims 1-32 are currently pending. Reconsideration and allowance of the pending claims is respectfully requested.

Summary of the Office Action

The abstract of the disclosure is objected to because it exceeds the limit of 150 words. Correction is required. See MPEP 608.01(b).

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claims 2, 31, 32 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel those claims. Note that claim 2 merely repeats limitations already recited in parent claim 1. Claims 31, 32 merely repeat limitations already recited in parent claims 1 and 23 respectively.

Claims 1 - 32 are rejected on the grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-14, 21-23, 28-31, 33-37, 41-44 of U.S. Patent No. 6,691,109. Although the conflicting claims are not identical, they are not patentably distinct from each other because independent claims 1 and 23 merely differ form claims 1 and 31 of the US Patent by removing "sequence" from the claimed

sequence database and query sequence of the US Patent. Thus the US Patent anticipates claims 1-32 of the present application.

Amendments To The Abstract

Abstract has been amended according to MPEP 608.01(b).

Amendments To The Claims

Claims 2, 31 and 32 are currently amended as suggested by the Examiner

The office action states: "The abstract of the disclosure is objected to because it exceeds the limit of 150 words. Correction is required. See MPEP 608.01(b)."

In response to the above objection, applicant has amended the abstract to recite: A computer-implemented method and apparatus of searching a plurality of queries against at least one database containing a plurality of records. The plurality of queries is partitioned into a set of smaller subsets of queries. Then at least one database is partioned into a set of smaller subdatabases. Searching tasks to be performed are designated by associating each of said subsets of queries with one or more of said subdatabases. assigning each searching task to one of a group of computers operating in parallel, wherein each member of the group of computers operating in parallel has at least one searching task assigned thereto, and executing at least some of the assigned searching tasks using the group of computers operating in parallel. At least one of the searching tasks is further divided into two or more smaller searching tasks, and the two or more smaller tasks are designated as related tasks on a virtual shared memory bulletin board. Search results are collected from the executed searching tasks and a unified search result is generated in accordance with the collected search results. The partitioning of the queries and the partitioning of the database are done by one or more members of the group of computers operating in parallel.

The office action states: "The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed."

In response to the above objection, the title of the invention has been changed to: "Searching Queries Using Database Partitioning".

The office action states: "Claims 2, 31, 32 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel those claims. Note that claim 2 merely repeats limitations already recited in parent claim 1. Claims 31, 32 merely repeat limitations already recited in parent claims 1 and 23 respectively."

In response to the above objection, claims 2, 31 and 32 are cancelled.

The office action states: "Claims 1 - 32 are rejected on the grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-14, 21-23, 28-31, 33-37, 41-44 of U.S. Patent No. 6,691,109. Although the conflicting claims are not identical, they are not patentably distinct from each other because independent claims 1 and 23 merely differ form claims 1 and 31 of the US Patent by removing "sequence" from the claimed sequence database and query sequence of the US Patent. Thus the US Patent anticipates claims 1-32 of the present application.

Patent 6,691,109 is commonly owned by the applicant. To overcome the nonstatutory obviousness type double patenting rejection of claims 1-32, applicant is herewith filing a terminal disclaimer, Form PTO/SB/26, attached.

Conclusion

Applicant respectfully requests that a timely Notice of Allowance be issued in this case. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of this application, the Examiner is requested to call the undersigned.

Respectfully submitted,

Fcb.20,07

Date

A. Tankle

Ashok Tankha, Esq. Attorney For Applicant

Reg. No. 33,802 Phone: 856-266-5145

Correspondence Address
Of Counsel, Lipton, Weinberger & Husick
36 Greenleigh Drive
Sewell, NJ 08080

E-mail: ash@ipprocurement.com